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MANUAL  
AND FULL DESCRIPTION  
of the  
Simple Cost System

created and adopted by

The International Association of Manufacturing  
Photo-Engravers

November, 1916, Edition



862-863 MONADNOCK BLOCK, CHICAGO



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# THE SIMPLE COST SYSTEM.

*And All There Is to be Known about It*

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## *Introductory*

It may be taken for granted that you entered the photo-engraving business with the idea of making money. If you have the right conception of business and if you know what profits are and mean, you have probably met with a sad disappointment. What is to follow is intended for men who take the photo-engraving business seriously, for those who treat it as a business, not as a side-line or a means to an end.

A glance into the past discloses the fact that but very few men ever succeeded in accumulating a competency out of the photo-engraving business. The men who were in it years ago, *when costs were low and prices high*, did not create fortunes out of this business. None retired wealthy on money made in the photo-engraving business and most of them are today either making a living and nothing more, or are engaged in other and better-paying lines. We might as well face the truth and look the situation squarely in the eye.

If these men, working under much more favorable conditions than you are today, *paying less for everything they bought and getting more for everything they sold*, could not accumulate even a modest sum to keep them in their old days, how can you expect to fare better if you persist in making the same mistakes they did?

**The greatest mistake ever made by engravers is to assume that it costs the same amount per square inch to make plates, regardless of their size, and to sell them upon a flat, square-inch basis. Wipe out that error and you will wipe out your losses and increase your profits.**

Because it has been published and circulated widely, you are familiar with the Standard Scale of Prices approved by the Indianapolis Convention. This Scale takes into consideration the fact that small plates cost more in proportion than large plates. That wipes out mistake number one. Read the reading notes and you will see that certain portions of the work are to be sold on the basis of time work. Now remember that everything about this Standard Scale is based upon the **COST OF PRODUCTION**, not in one shop or one city, but



in many shops in a number of cities, and that the facts were gathered over a period of years.

In order to sell your products intelligently and at a profit, *you must know the cost of production*. This, the Simple Cost System will give you. We cannot combine to raise prices and eliminate competition. As a matter of fact there is no necessity for such an act and certainly no desire for it. We cannot compel men to do what we ask them to do. On the other hand, we are not expected to conduct our businesses at a loss nor do we have to give away a part of our product. We have a perfect and well-defined right to educate the photo-engravers in every phase of the business, and no one will object to our endeavors to improve the business and the men in it.

It will not do for some of us to know these things and to alone profit by that knowledge. We cannot hope to enrich one part of our craft and at the same time impoverish the remainder. We have discovered the fundamental wrongs of this business and we have found the remedies therefor.

The Simple Cost System will teach you more about your business than you ever knew before and the Standard Scale will enable you to make use of what you have learned. One is of no value without the other. *Unless you know your cost of production, you cannot properly use the Standard Scale.* LEARN THE ONE AND USE THE OTHER.

### ***Mistakes of the Past—and What They Have Cost***

Man is not inclined to view with favor the thing he gets for nothing. To disabuse anyone of the idea that the result of the Cost Committee's work is a free gift to photo-engravers, let it be known that we have paid a fabulous price for it.

The International Association has been in existence nineteen years. Let us say that the average annual dues of the Association for the first eighteen years of its existence were \$1,000 per year,—a total of \$18,000. In the last two years we have collected and spent, in behalf of all photo-engravers, the sum of \$60,000. The individual expenses of every man attending the various conventions can be set at \$100, a total expense, for this item alone, of \$140,000. We can safely say that our organizational efforts during the past seventeen years have cost the sum of \$200,000.



At the Boston Convention a Cost Committee was appointed to gather statistics of cost and to formulate, if possible, a Basic Selling Plan. This the Cost Committee has done. In addition thereto and based upon the evidence obtained from those operating cost-finding systems, the Cost Committee has formulated a Simple Cost System and now, after nineteen years of effort, we have TWO CONCRETE PLANS FOR IMPROVING THE BUSINESS—*A Standard Selling Schedule and a Simple Cost System.*

As these two propositions are the result of nineteen years of effort and represent a cash expenditure of over \$200,000 out of the pockets of photo-engravers, it can hardly be said that you are getting something for nothing. To get an idea of the enormous cost at which our efforts have been secured, let me call your attention to the following staggering figures. Estimating the annual sales in the photo-engraving industry at only \$10,000,000 per year for the last fifteen years, a total of \$150,000,000 is obtained. The lack of a Standard Selling Schedule and ignorance of costs has cost the photo-engravers of this country a loss of at least ten per cent in revenues and one hundred per cent in profits during all the time they have been in business. Considering only the period of fifteen years, the loss sustained by you, all of which could have been saved, amounts to ten per cent of that immense sum, or \$15,000,000 — a loss of \$1,000,000 per year divided among 500 firms.

*Raise your selling prices ten per cent and you double your profits.*

*Is it worth while?*

### ***The Simple Cost System—What It Is***

*Cost is the exact sum of all expenditures incurred in connection with an item, including expenses of manufacturing, marketing or other handling up to the point at which cost is determined.—Denham.*

The Simple Cost System is a method by which you can ascertain correctly the cost of any article you manufacture in your photo-engraving department. Broadly speaking, only two elements enter into the production of photo-engraved plates—materials and labor. The Simple Cost System tells you the cost of materials and it tells you the exact hour cost of labor. If you have your workmen record the amount of time they consume in making a plate and if you know its size, you can readily and without mental effort on your part figure up the value of the material and the value of the labor and by adding the two you arrive at COST.

No business can be safe nor can any manufacturer be considered a business man unless the cost of production is known. The Simple Cost System, based upon the fundamental truth that everything you buy and sell is expressed in MATERIALS and LABOR, finds the true cost of each. This is a simple act when dealing with material, because those items practically separate themselves from all other expenses, consequently the cost of materials can be easily obtained. The TRUE COST OF LABOR is not so easily determined. The wages paid out to labor are self-evident, but inasmuch as LABOR must pay for itself and carry all other expenses, it becomes necessary to establish the exact ratio of the labor expense to all other expenses and then add a sum to the wages paid the workmen large enough to cover all other expenses and include NON-PRODUCTIVE TIME.

That is exactly what the Simple Cost System is and does.

### ***How It Is Created***

If cost is the exact sum of all expenditures incurred in the making and handling of an item, then we must go to the expense account (Cash Book) to get our figures. This we have done.

Materials have been separated from all other expenses of the business and we found that *materials cost two cents per square inch for zinc etchings and three cents per square inch for copper halftones (1913).*

The cost of materials per square inch in this case means THE SOLD INCH. For every SOLD inch of materials, one-third of an inch is waste. In other words, 33  $\frac{1}{3}$  per cent of all materials is waste; only 66  $\frac{2}{3}$  per cent of your materials is sold in the shape of photo-engraved plates. To prove the cost of materials, take their total cost for one year, separate the items into two classes—zinc materials and halftone materials. Keep track of the number of square inches of zinc etchings and halftones you sell for one year. Divide the total cost of the zinc materials for the year by the number of square inches of zinc etchings sold during that period and the answer will be your cost of materials for zinc etchings on the SOLD INCH BASIS. Do the same with your halftone figures and you will get the cost of materials for halftones on the SOLD INCH BASIS. If you allow yourself a fair margin on the materials to cover cost of handling and interest you will find our figures of two and three cents per SOLD INCH as the correct prices for the materials entering into zinc etchings and halftones respectively.

Having disposed of materials, we take all other expenses connected with the photo-engraving department and divide them into four classifications, as follows:

*Shop Pay-Roll (DIRECT LABOR).*—Wages paid to men actually employed in the production of photo-engraved plates.

*Superintendence (INDIRECT LABOR).*—Wages paid to superintendent, foremen, floor boys, etc.

*Shop Expense.*—Rent for shop, power, light, heat, water, janitor service, repairs, etc., etc.

*Office Expense.*—All so-called Overhead expenses, such as executive salaries, salesmen's salaries, advertising, delivery, office rent and light, interest on investment, depreciation, etc.

The following illustration shows exactly how the items of expense were taken from the Cash Book and separated.

In creating the Simple Cost System the expenses of one plant for the period of two years were first considered. Then to verify the figures, we took the expenses of five different firms for the period of six months, separated the expenses into the various classifications and compared them with our first figures. You can see the result. They are practically identical.



*Division of Expenses (Material Not Included)*

|                       | 5 Plants<br>6 Months | 1 Plant<br>2 Years | Average     |
|-----------------------|----------------------|--------------------|-------------|
| Shop Pay-Roll .....   | \$50,580             | \$51,810           | 51%         |
| Superintendence ..... | 5,620                | 6,080              | 6%          |
| Shop Expense .....    | 13,200               | 12,890             | 13%         |
| Office Expense .....  | 30,520               | 28,520             | 30%         |
|                       | <u>\$99,920</u>      | <u>\$99,300</u>    | <u>100%</u> |

At your leisure, go to your own Cash Book, separate your expenses in exactly the same manner as shown here and see how your figures compare with ours. Put each classification on a percentage basis and then see what percentage of your total expense each class represents. That will tell the story. You may not divide and classify your expenses exactly as we have done, but you certainly cannot go wrong on the Shop Pay-Roll. IF YOUR SHOP PAY-ROLL REPRESENTS ABOUT FIFTY PER CENT OF YOUR TOTAL EXPENSES, exclusive of materials, THEN OUR HOUR RATE AND THE LABOR COST CALCULATOR FIT YOUR CONDITIONS EXACTLY.

Don't lose track of the fact that the Shop Pay-Roll (Direct Labor expense) is almost exactly one-half, or fifty per cent of the total expense, EXCLUSIVE OF MATERIALS. It follows naturally that if DIRECT LABOR AMOUNTS TO ONE-HALF OF YOUR TOTAL EXPENSES, TO GET THE LABOR COST PER HOUR YOU HAVE TO MULTIPLY BY TWO THE WAGES PAID THE WORKMAN. In other words, if you pay your workman fifty cents per hour and if that amount represents just one-half of what it costs you for everything outside of labor, then if labor is to be made the unit of reckoning, *you must double it to show its true cost to you.*

The foregoing is a very simple problem in arithmetic and one any ten-year-old boy can solve. But there is another item to be taken into consideration. Someone has to pay for NON-PRODUCTIVE TIME.

Non-productive time is time paid for by you, but which cannot be sold directly to the customer in the shape of finished plates. It represents time lost for various reasons. Your workmen may be idle part of the day because business is slack. Your power may be shut down. Your equipment may be out of order. Your water supply may fail you partly or at times altogether. Your men may be idle for most any



| CASH                                | CR.      | Materials | Direct Labor | Indirect Labor | Shop Expense | Office Expense | Sold Items |
|-------------------------------------|----------|-----------|--------------|----------------|--------------|----------------|------------|
| Shop Pay-Roll.....                  | \$556.63 | .....     | \$498.17     | \$58.46        | .....        | .....          | .....      |
| Gas.....                            | 21.12    | .....     | .....        | .....          | \$21.12      | .....          | .....      |
| Camera Repairs.....                 | 84.00    | .....     | .....        | .....          | 84.00        | .....          | .....      |
| Oil.....                            | 1.80     | \$1.80    | .....        | .....          | .....        | .....          | .....      |
| Paper.....                          | 3.60     | 3.60      | .....        | .....          | .....        | .....          | .....      |
| Color Plate Co.....                 | 2.50     | .....     | .....        | .....          | .....        | .....          | \$2.50     |
| Office Pay-Roll.....                | 150.00   | .....     | .....        | .....          | .....        | \$150.00       | .....      |
| Advertising.....                    | 60.00    | .....     | .....        | .....          | .....        | 60.00          | .....      |
| Ice and Water, Shop.....            | 2.50     | .....     | .....        | .....          | 2.50         | .....          | .....      |
| Ice and Water, Office.....          | 1.50     | .....     | .....        | .....          | .....        | 1.50           | .....      |
| Photo.....                          | 2.00     | .....     | .....        | .....          | .....        | 5.00           | 2.00       |
| Donation.....                       | 5.00     | .....     | .....        | .....          | .....        | .....          | .....      |
| Silver.....                         | 28.50    | 28.50     | .....        | .....          | .....        | .....          | .....      |
| Chemicals.....                      | 15.85    | 15.85     | .....        | .....          | .....        | .....          | .....      |
| Copper.....                         | 36.45    | 36.45     | .....        | .....          | .....        | .....          | .....      |
| Zinc.....                           | 28.50    | 28.50     | .....        | .....          | .....        | .....          | .....      |
| Hardware.....                       | 2.19     | .....     | .....        | .....          | 2.19         | .....          | .....      |
| Shop Pay-Roll.....                  | 556.63   | .....     | 498.17       | 58.46          | .....        | .....          | .....      |
| Glass.....                          | 16.00    | .....     | .....        | .....          | 16.00        | .....          | .....      |
| Rent, Light and Power.....          | 357.56   | .....     | .....        | .....          | 357.56       | .....          | .....      |
| Electrical Repairs.....             | 4.50     | .....     | .....        | .....          | 4.50         | .....          | .....      |
| Office Rent and Light.....          | 80.40    | .....     | .....        | .....          | .....        | 80.40          | .....      |
| Petty Cash, Office.....             | 12.25    | .....     | .....        | .....          | .....        | 12.25          | .....      |
| Petty Cash, Shop.....               | 8.40     | .....     | .....        | .....          | 8.40         | .....          | .....      |
| Freight.....                        | 1.50     | 1.50      | .....        | .....          | .....        | .....          | .....      |
| International Association Dues..... | 30.00    | .....     | .....        | .....          | .....        | 30.00          | .....      |
| Local Club Dues.....                | 5.00     | .....     | .....        | .....          | .....        | 5.00           | .....      |
| Chemicals.....                      | 24.80    | 24.80     | .....        | .....          | .....        | .....          | .....      |
| Office Pay-Roll.....                | 150.00   | .....     | .....        | .....          | .....        | 150.00         | .....      |
| Plumber.....                        | 12.20    | .....     | .....        | .....          | 12.20        | .....          | .....      |
| Ink.....                            | 3.50     | 3.50      | .....        | .....          | .....        | .....          | .....      |
| Paint.....                          | 1.50     | .....     | .....        | .....          | 1.50         | .....          | .....      |

### Illustrating How You May Separate Your Expenses

The left-hand column represents a page from your Cash Book. The columns to the right show the different classifications and how to transfer your individual expenditures from the Cash Book to a sheet ruled so you can place each item of expense under its proper heading.

Figure up your expenses for a year, then see what percentage of the whole is represented by each classification.

Add up your "Material" expenses and your "Sold Items" and subtract both from your **Total Expense**. Materials have been otherwise provided for, and Sold Items should not be charged against any of the four classifications we are using to arrive at cost.

Our figures show that Direct Labor is 51 per cent of the Total Expense (Materials Excluded).

|                   |    |   |   |   |   |
|-------------------|----|---|---|---|---|
| Indirect Labor is | 6  | " | " | " | " |
| Shop Expense is   | 13 | " | " | " | " |
| Office Exp'nse is | 30 | " | " | " | " |

100 per cent

### WHAT DO YOUR FIGURES SHOW?

reason at all, but the fact remains that you pay for their full time, although it is not all used in the production of plates. Your photographer has to polish screens and lenses. He has to mix chemicals and boil silver baths. Your etchers have to stop work in order to attend to their equipment. The router and blocker has to repair belts, clean motors, sharpen cutting tools; in fact, every one of your workmen puts in a part of his time at some of these things **AND YOU PAY HIM FOR HIS TIME.**

**IF YOU SOLD ALL YOUR PRODUCTS ON THE BASIS OF THE ACTUAL TIME CONSUMED IN THEIR MAKING, YOU WOULD LOSE MONEY, UNLESS YOU MADE YOUR HOUR RATE HIGH ENOUGH TO COVER NON-PRODUCTIVE TIME.**

The Simple Cost System is based upon the experience and records of a number of shops throughout the country. A careful comparison of these records has disclosed the fact that conditions are very much alike in all photo-engraving establishments in the long run. Variations may and will occur, but they happen only when the records cover a short period of time. When they are kept for a year or more, they are astonishing in their similarity. For instance: We figure the non-productive time as being eight hours per week on the part of every workman. When you are extremely busy, you will perhaps have less than eight hours of non-productive time per week. When business is dull, you are sure to have more than eight hours of non-productive time per week. **EIGHT HOURS NON-PRODUCTIVE TIME OUT OF FORTY-EIGHT HOURS PER WEEK IS A FAIR AVERAGE CONDITION** and we have accepted it as such. It goes without saying that you cannot change your prices with the fluctuations of your sales, nor can you change your prices after you have given your estimate on a job. Accept what we give you until you have had ample opportunity to learn the exact conditions in your own plant. It will take you at least a year to determine them for yourself.

As before stated, we have come to the conclusion that the average amount of non-productive time amounts to eight hours per week on the part of every workman.

Your total expenses, exclusive of materials, are divided into four classifications: Shop Pay-Roll (Direct Labor), Superintendence (Indirect Labor), Shop Expense and Office Expense. Out of these four

sources of expense, there is only one that actually produces the goods you sell, namely, DIRECT LABOR.

Therefore, YOU MUST SELL DIRECT LABOR AT A PRICE THAT WILL PAY FOR ITSELF, COVER EVERY OTHER ITEM OF EXPENSE (materials excluded) AND PRODUCE A PROFIT.



The Dollar of Expense.

The shaded portion — Direct Labor — must carry All Other Expenses and Produce the Profits.

If you will glance at the illustration, "The Dollar of Expense," you will get the idea very quickly. Fifty-one cents out of every dollar of expense go to your workmen. To double the workman's wages would give you the hour cost EXCLUSIVE OF THE NON-PRODUCTIVE TIME. If you do not take the non-productive time into consideration, you cheat yourself. You buy forty-eight hours per week, you sell FORTY HOURS PER WEEK. TAKE THE WAGES OF ANY ONE OF YOUR WORKMEN PAID HIM FOR FORTY-EIGHT HOURS' WORK, DI-



VIDE THAT SUM BY FORTY, MULTIPLY THE RESULT BY TWO AND YOU HAVE HIS HOUR COST.

To illustrate: You pay a workman twenty-four dollars per week for forty-eight hours' work. His rate, then, is fifty cents per hour. But you sell only forty hours of his time per week; therefore his rate on the *sold hour basis* is sixty cents per hour. Since the workmen's wages are just one-half of your total expense, now that we have taken the non-productive time into consideration, we simply **DOUBLE THE SOLD HOUR COST AND WE GET THE TRUE HOUR COST**. That is why the I. A. M. P. E. Cost Calculator is based on **DOUBLE THE WAGES PAID FOR FORTY SOLD HOURS PER WEEK**.

| WAGE | MINUTES |         |    |    |     |     |     |     |     |     |     |     | HOURS |       |      |      |      | WAGE |  |
|------|---------|---------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|------|------|------|------|--|
|      | 5       | 10      | 15 | 20 | 25  | 30  | 35  | 40  | 45  | 50  | 55  | 1   | 2     | 3     | 4    | 5    |      |      |  |
| 10   | 5       | 9       | 13 | 17 | 21  | 25  | 30  | 34  | 38  | 42  | 46  | 50  | 100   | 150   | 200  | 250  | 10   |      |  |
| 12   | 5       | 10      | 15 | 20 | 25  | 30  | 35  | 40  | 45  | 50  | 55  | 60  | 120   | 180   | 240  | 300  | 12   |      |  |
| 14   | 6       | 12      | 18 | 24 | 30  | 35  | 41  | 47  | 53  | 58  | 65  | 70  | 140   | 210   | 280  | 350  | 14   |      |  |
| 16   | 7       | 14      | 20 | 27 | 34  | 40  | 47  | 54  | 60  | 67  | 74  | 80  | 160   | 240   | 320  | 400  | 16   |      |  |
| 18   | 8       | 15      | 23 | 30 | 38  | 45  | 53  | 60  | 68  | 75  | 83  | 90  | 180   | 270   | 360  | 450  | 18   |      |  |
| 20   | 9       | 17      | 25 | 34 | 42  | 50  | 59  | 67  | 75  | 84  | 92  | 100 | 200   | 300   | 400  | 500  | 20   |      |  |
| 21   | 9       | 18      | 27 | 35 | 44  | 53  | 62  | 71  | 80  | 89  | 97  | 105 | 210   | 315   | 420  | 525  | 21   |      |  |
| 22   | 10      | 19      | 28 | 37 | 46  | 55  | 65  | 74  | 83  | 92  | 101 | 110 | 220   | 330   | 440  | 550  | 22   |      |  |
| 23   | 10      | 20      | 29 | 39 | 49  | 58  | 68  | 78  | 87  | 97  | 106 | 115 | 230   | 345   | 460  | 575  | 23   |      |  |
| 24   | 10      | 20      | 30 | 40 | 50  | 60  | 70  | 80  | 90  | 100 | 110 | 120 | 240   | 360   | 480  | 600  | 24   |      |  |
| 25   | 11      | 21      | 32 | 42 | 53  | 63  | 74  | 84  | 95  | 105 | 114 | 125 | 250   | 375   | 500  | 625  | 25   |      |  |
| 26   | 11      | 22      | 33 | 44 | 55  | 65  | 76  | 87  | 98  | 109 | 120 | 130 | 260   | 390   | 520  | 650  | 26   |      |  |
| 27   | 12      | 23      | 34 | 45 | 57  | 68  | 80  | 91  | 102 | 113 | 124 | 135 | 270   | 405   | 540  | 675  | 27   |      |  |
| 28   | 12      | 24      | 35 | 47 | 59  | 70  | 82  | 94  | 105 | 117 | 129 | 140 | 280   | 420   | 560  | 700  | 28   |      |  |
| 29   | 13      | 25      | 37 | 49 | 61  | 73  | 86  | 98  | 110 | 122 | 133 | 145 | 290   | 435   | 580  | 725  | 29   |      |  |
| 30   | 13      | 25      | 38 | 50 | 63  | 75  | 88  | 100 | 113 | 125 | 138 | 150 | 300   | 450   | 600  | 750  | 30   |      |  |
| 32   | 14      | 26      | 40 | 54 | 67  | 80  | 94  | 107 | 120 | 134 | 147 | 160 | 320   | 480   | 640  | 800  | 32   |      |  |
| 34   | 15      | 29      | 43 | 57 | 72  | 85  | 100 | 114 | 128 | 142 | 156 | 170 | 340   | 510   | 680  | 850  | 34   |      |  |
| 36   | 15      | 30      | 45 | 60 | 75  | 90  | 105 | 120 | 135 | 150 | 165 | 180 | 360   | 540   | 720  | 900  | 36   |      |  |
| 38   | 16      | 32      | 48 | 64 | 80  | 95  | 111 | 127 | 143 | 159 | 175 | 190 | 380   | 570   | 760  | 950  | 38   |      |  |
| 40   | 17      | 34      | 50 | 67 | 84  | 100 | 117 | 134 | 150 | 167 | 184 | 200 | 400   | 600   | 800  | 1000 | 40   |      |  |
| 45   | 19      | 38      | 57 | 75 | 94  | 113 | 132 | 151 | 166 | 188 | 207 | 225 | 450   | 675   | 900  | 1125 | 45   |      |  |
| 50   | 21      | 42      | 63 | 84 | 105 | 125 | 146 | 167 | 188 | 209 | 229 | 250 | 500   | 750   | 1000 | 1250 | 50   |      |  |
| WAGE | 5       | 10      | 15 | 20 | 25  | 30  | 35  | 40  | 45  | 50  | 55  | 1   | 2     | 3     | 4    | 5    | WAGE |      |  |
| 2x40 |         | MINUTES |    |    |     |     |     |     |     |     |     |     |       | HOURS |      |      |      |      |  |

2x40

MINUTES

HOURS

I. A. M. P. E. Labor Cost Calculator.

This Calculator saves figuring. It gives you the hour cost of any workman in your employ on the basis of Double the Wages Paid for Forty Sold Hours per Week.



To find the cost of a plate, you get a record of each workman's time consumed in its making. You locate each workman's weekly pay on the left side of the Cost Calculator and you follow the line to the right until you come to the amount of time consumed in minutes or hours. The figures appearing at that point give you the cost of his time. In that manner you get the cost of every man's time appearing on the cost ticket. Add up all items of labor cost and add to that sum the cost of materials at two cents an inch for zinc etchings or three cents an inch for halftones. The result is the complete cost of that particular piece of work.

The foregoing description of the Simple Cost System covers the subject fully. Read it over carefully and you will know all there is to be known about it. It has been our aim not only to present you with the Simple Cost System, but to explain every detail of it so that you can verify it step by step. Its use in the beginning will produce mystifying results and at times you will doubt your own figures. Stick to it and you will soon see why things are thus and so. No doubt you have your own ideas on the subject, and perhaps you have long suspected some of the things the Simple Cost System will show you. The difference is, if you use the Simple Cost System **YOU WILL KNOW**—you won't have to guess or surmise. There are none so badly fooled as those who fool themselves, and engravers have fooled themselves long enough.

Perhaps you do not believe all we have told you about this Cost System. Very likely you are of the opinion that such conditions as we assert to be facts do not exist in your shop. Very well. We have told you exactly how we arrive at our conclusions and you can check us up and check the Simple Cost System up in any way you like. We'll change our figures as soon as you prove conclusively that they are wrong. That's fair, is it not?

### ***How to Install the Simple Cost System***

Before you send a cost ticket into the shop, explain to your workmen that in order to conduct your business properly and with due regards to all concerned, it is necessary for you to know the cost of production of every article manufactured. Have them understand that you want a correct record of the time consumed in the manufacture of the work, so that you can arrive at a fair selling price, one that will permit you to pay the workmen good wages and net a fair profit for

yourself. When your workmen understand your motives they will co-operate with you and take as much interest in cost finding as you do, because it means just as much to them as it means to you. Do not forget that both you and your workmen will be surprised at the facts produced by the cost tickets. Take them as they come to you and use them properly. The same facts always existed, only you did not know it and your workmen did not even suspect it.

FORM "A"

| NO.                    | Hrs. | Min. | \$ | ¢  |
|------------------------|------|------|----|----|
| 127.                   |      |      |    |    |
| Photographer           |      | 25   |    | 63 |
| Stripper               |      | 5    |    | 10 |
| Printer                |      | 5    |    | 10 |
| Etcher                 |      | 15   |    | 32 |
| Finisher               |      | 15   |    | 34 |
| Router                 |      | 5    |    | 11 |
| Blocker                |      | 5    |    | 10 |
| Proofer                |      | 15   |    | 30 |
| 15 Sq. in. Copper @ 3¢ |      |      |    | 45 |
| Sq. in. Zinc @ 2¢      |      |      |    |    |
| TOTAL                  |      |      | 2. | 45 |

REMEMBER THIS POINT: THE SIMPLE COST SYSTEM IS NOT A FAULT-FINDING SYSTEM. IT IS INTENDED TO SHOW YOU EXACTLY WHAT YOUR COSTS ARE.

Referring to the blank forms furnished with the Simple Cost System and illustrated herewith, and the I. A. M. P. E. Labor Cost Calculator, let us assume that you operate a very small photo-engraving plant, employing, say, four or five men. Perhaps you do not use shop tickets or order tickets of any kind and you simply mark sizes and other instructions on the back of copies or on a slip of paper. In that case fasten one of the little cost tickets marked "Form A" on the back of the copy or on the envelope in which the copy is

sent to the shop. If there are more than one copy in the order, keep the cost record for the entire order on one ticket or send in a ticket for each plate, just as you see fit.

Now have each one of your workmen record in its proper place on the cost ticket the exact amount of time consumed by him in handling each job. When the work is completed, the copy, plate, proof and cost ticket will all reach the office at the same time.

The Labor Cost Calculator will give you the hour cost of each workman. Add up the labor costs thus obtained, then add to that

FORM "B." From \_\_\_\_\_ to \_\_\_\_\_ 191 \_\_\_\_\_

**Halftones****Zinc Etchings****Color Plates**

| CHARGED TO                | BILL NO. | PL. | SQ. IN. | COST  | CHARGE | EXTRAS | PROFIT | LOSS |
|---------------------------|----------|-----|---------|-------|--------|--------|--------|------|
| <i>Jones &amp; Co.</i>    | 1416     | 1   | 15      | 1.27  | 90     |        |        | 37   |
| <i>Smith Print Co.</i>    | 1417     | 2   | 70      | 3.50  | 4.70   | .50    | 1.20   |      |
| <i>A. B. Johnson</i>      | 1420     | 1   | 10      | 1.05  | .60    |        |        | 40   |
| <i>Geo. Walters</i>       | 1424     | 1   | 15      | .97   | .60    |        |        | 37   |
| <i>Pope Food Co.</i>      | 1430     | 5   | 50      | 2.50  | 3.00   | .75    | 1.25   |      |
| <i>Prinoris &amp; Co.</i> | 1435     | 25  | 600     | 33.27 | 34.00  |        | 2.73   |      |
| <i>James Gristan</i>      | 1437     | 70  | 350     | 24.50 | 21.00  |        |        | 3.50 |
| <i>Chas. Wood</i>         | 1447     | 3   | 45      | 4.05  | 2.70   |        |        | 1.35 |
| <i>J. B. Murphy</i>       | 1450     | 1   | 10      | .83   | .60    |        |        | 23   |

sum two cents per square inch for zinc etchings or three cents per square inch for halftones for the size of the plate, and you have the **TOTAL COST OF THE JOB.**

If you are a bit ambitious and want to know just what you are doing from day to day, then use the blank marked "Form B." Let your bill clerk or bookkeeper have several of these blanks before him and as soon as a job is completed, let him put down the results of that job on this blank. Use one blank for zinc etchings, another for halftones and another for color work, etc. In this way you can separate the different classes of work, and you will have an ever-ready and up-to-the-minute schedule of your output, showing the full particulars of each order, together with the item of profit or loss. You can keep these records by the day, the week or the month. Once you begin to keep them, you will be closer to the pulse of your business than you



ever were before. Just imagine being able to tell in a minute's time exactly how many of each kind of plates you made during a day, week or month and how much you gained or lost by the operation and exactly where and when such gain or loss was incurred.

## FORM "C."

| COST RECORD        |    |                     |  | Hrs. | Min. | \$   | ¢ | 65 Line    | Like Copy  | White Letter | Inserts           |
|--------------------|----|---------------------|--|------|------|------|---|------------|------------|--------------|-------------------|
| Photographs        |    |                     |  |      |      |      |   | 85 Line    | Oval       | Embossing    | Color Plates      |
| Retouching         |    |                     |  |      |      |      |   | 100 Line   | Outline ✓  | Metal Base   | 2 Proofs          |
| Sketch             |    |                     |  |      |      |      |   | 120 Line   | Vignette ✓ | Mortise      | Submit for O. K.  |
| Drawing            |    |                     |  |      |      |      |   | 133 Line   | No Line    | Anchor       |                   |
|                    |    |                     |  |      |      |      |   | 150 Line ✓ | Square     | Trim Flush   | Regular on Wood ✓ |
| Photographer       |    | 35                  |  |      |      | 88   |   |            |            |              |                   |
| Stripper           |    | 5                   |  |      |      | 10   |   |            |            |              |                   |
| Printer            |    | 5                   |  |      |      | 10   |   |            |            |              |                   |
| Etcher             |    | 1 25                |  |      |      | 1 99 |   |            |            |              |                   |
| Finisher           |    | 2                   |  |      |      | 3 00 |   |            |            |              |                   |
| Router             |    | 15                  |  |      |      | 30   |   |            |            |              |                   |
| Blocker            |    | 5                   |  |      |      | 10   |   |            |            |              |                   |
| Proofer            |    | 20                  |  |      |      | 42   |   |            |            |              |                   |
|                    | 30 | Sq. In. Copper @ 3¢ |  |      |      | 90   |   |            |            |              |                   |
|                    |    | Sq. In. Zinc @ 2¢   |  |      |      |      |   |            |            |              |                   |
|                    |    |                     |  |      |      | 7 79 |   |            |            |              |                   |
| Express or Carfare |    |                     |  |      |      | 10   |   |            |            |              |                   |
| Other Charges      |    |                     |  |      |      |      |   |            |            |              |                   |
| Price              |    |                     |  |      |      | 7 50 |   |            |            |              |                   |
| Profit or Loss     |    |                     |  |      |      | 37   |   |            |            |              |                   |

  

| DRAWING                |  | HALFTONE | ETCHING                    | ENGRAVING                             |
|------------------------|--|----------|----------------------------|---------------------------------------|
| Size                   | 4 3/4 X 6  | Subject  | Retouched Photo of Machine |                                       |
| Salesman, Instructions | Make strong contrasty Plate.<br>Tool Highlights. |          |                            |                                       |
| Other Work             | ELECTROS   |          | Credit O.K.                |                                       |
| Req. No.               | 4672   |          | Invoice No. 13426          |                                       |
| Order No.              | 7  | 10       | 26                         | Wanted 7/11 - 9 A. M. Delivered P. M. |
| Name                   | Jas. H. Walker Co.                               |          |                            | Ship via Box                          |
| Address                | 672 N. Superior St. City.                        |          |                            |                                       |

Now let us assume that you conduct a larger shop and that you have a complete office equipment and plenty of office help. In that case you will want a Shop or Order ticket as well as a Cost Record. For you we advise the use of blank marked "Form C." In fact, every shop, no matter how large or small, should have an Order ticket to carry the instructions to the workmen. We offer you such a blank and in this case we have added a Cost Record to the Order ticket. This ticket is handled in the following manner. It is printed in duplicate form, white and pink sheets alternating. Your salesman or order clerk fills in the blank spaces necessary to carry the instructions. By placing a sheet of carbon paper between the two sheets he gets an exact duplicate copy of the sheet he writes. One sheet is sent into the shop, the other is kept on file in the office. On the left-hand side of the ticket will be found the cost record. The workmen record their time as they go



along and when the ticket finally reaches the office and is figured up, *you have on one sheet of paper a full description of the job, every detail pertaining to it and a record of its cost of production.* A flat proof of the job may then be attached to the ticket and it can be filed together with its duplicate as a permanent record.

To capitulate:

Blank marked "Form A" is the simplest form of cost ticket known. It is intended to record the cost of production only and answers no other purpose.

Blank marked "Form B" is used to tabulate the results of your cost records and can be used in conjunction with any kind of cost or order ticket. It takes no time to keep these records and if you do, you will know at any and all times just what you are doing and at what cost.

Blank marked "Form C" is a complete Order and Cost ticket. It will fit practically every engraving establishment and answer the purpose better than perhaps the form you are using for merely your Order Ticket.

The general adoption of these forms will result in UNIFORMITY, something greatly to be desired. Workmen will quickly become familiar with the blanks and many mistakes due to misunderstanding will be eliminated. It will be a great step toward STANDARDIZATION, perhaps the greatest the photo-engravers have ever undertaken.

You now have in your possession everything necessary to install and use the Simple Cost System. Additional blanks can be secured from the Commissioner at COST to the I. A. M. P. E. Electros of any of the forms can be secured likewise.

In placing the Simple Cost System before you ready for use, FREE OF CHARGE, the Officers of the International Association of Manufacturing Photo-Engravers feel that they are rendering you a signal service: They are actuated by the highest motives and a sincere desire to aid you as a brother photo-engraver. There is nothing altruistic about this. It is just plain common sense and in keeping with the spirit of the times. The use of the Simple Cost System and the Standard Scale will enable you to do your share in the uplift of the photo-engraving business. *The use of the Simple Cost System and the Standard Scale will enable you to reduce your losses and increase your profits, will take care of you and yours and make you proud of the fact that you are in the photo-engraving business.*

***Agreement between the International Association of Manufacturing Photo-Engravers and the International Photo-Engravers' Union of North America***

*WITNESSETH: First.* It is agreed by the International Photo-Engravers' Union of North America, that members of the International Photo-Engravers' Union will co-operate with the International Association of Manufacturing Photo-Engravers of North America in the installation and operation of the "Simple Cost System" adopted by the International Association of Manufacturing Photo-Engravers at its convention held in Indianapolis, Ind., June 23, 24 and 25, 1913, in all photo-engraving establishments wherein members of the I. P. E. U. are employed and working under an agreement with the local union.

*Second.*—It is agreed by the International Association of Manufacturing Photo-Engravers that the object of installing and operating the said "Simple Cost System" is for the sole purpose of determining the true cost of production and its relation to existing prices in order to realize a fair margin of profit upon the sale of photo-engravings and that the said "Simple Cost System" is not intended and that it shall not be used in its entirety or any part thereof by any employer for the purpose of checking up or speeding up the workmen, or used in any way detrimental to the workmen or their working conditions.

*Third.* It is agreed by both parties to this agreement that in the event of any difference or differences arising in the installation, abuse or abuses arising or occurring under or during the operation of the said "Simple Cost System," such difference or differences, abuse or abuses shall be immediately adjusted in the following manner:

A. Whenever any member of either party to this agreement and coming under its provisions, shall feel themselves aggrieved in the operation of the said "Simple Cost System," the local parties in interest must meet in conference as soon as possible and not later than ten (10) days after complaint is made, at which conference (or continuation thereof) every effort to agree and adjust the grievance shall be made.

B. If five (5) days after the conference meeting provided in section "A," no agreement or adjustment has been reached, either party in interest may refer the grievance or complaint to the President of the International Association of Manufacturing Photo-Engravers and the President of the International Photo-Engravers' Union for immediate adjustment by submitting a complete statement to both of the aforementioned executive officers; such statement to embrace a complete statement of the grievance or complaint, and relate what effort has been made locally to adjust the grievance and cause of failure to do so. A copy of this statement must be furnished to all parties in dispute by the party referring the complaint or grievance to the said executive officers for adjustment, and the party or parties against whom the complaint or grievance is filed, shall immediately file its or their answer to all parties in interest.

C. Immediately upon receipt by the said Executive Officers of such statement, they shall consider and adjust the complaint or grievance as soon as possible,

but not later than ten (10) days after the original complaint has been filed with them. Upon their failure to agree or adjust the complaint or grievance, the entire matter shall be immediately referred to a joint conference committee; which committee shall consist of three members selected by and from the Executive Officers or Executive Committee of the International Association of Manufacturing Photo-Engravers, and three members selected by and from the Executive Council of the International Photo-Engravers' Union, who shall meet as soon as possible thereafter, but not later than ten (10) days after failure of said Executive Officers to agree, and proceed in adjusting the complaint or grievance.

D. The time of submission and consideration as fixed in sections A, B and C shall be binding in all cases unless the time has been expressly extended by the President of the International Association of Manufacturing Photo-Engravers and the President of the International Photo-Engravers' Union. Such extension of time shall apply only to the particular case for which it is extended.

E. All decisions shall become effective at once unless otherwise provided and shall be binding upon all, subject to appeal to the joint conference committee within thirty (30) days from date of decision; but the decisions of the joint conference committee shall be final and binding upon all parties in interest.

F. All expenses incurred by either party attendant upon the adjustment of any case shall be borne by each respective party.

G. The rules of procedure as herein or hereinafter agreed to may be amended at any meeting of the joint conference committee.

*Fourth.*—Both parties to this agreement specifically authorize the President of the International Association of Manufacturing Photo-Engravers and the President of the International Photo-Engravers' Union to give public disapproval and disavowal to any failure upon the part of any party in interest to comply with the terms of this agreement, and as herein provided.

IN WITNESS THEREOF, the undersigned, as duly authorized representatives of the two parties to this agreement, have hereunto affixed their signatures in approval thereof this first day of October, 1913.

INTERNATIONAL ASSOCIATION OF MANUFACTURING  
PHOTO-ENGRAVERS

By

E. W. HOUSER, *President.*

LOUIS FLADER, *Commissioner.*

INTERNATIONAL PHOTO-ENGRAVERS' UNION OF N. A.

By

MATTHEW WOLL, *President.*

LOUIS A. SCHWARZ, *Sec'y-Treas.*







# INTERNATIONAL ASSOCIATION MFG. PHOTO-ENGRAVERS' LABOR COST CALCULATOR

| Wage | MINUTES |     |     |     |      |      |      |      |      |      |      |      |      |      |       | HOURS |    |  |  |  | Wage |
|------|---------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|-------|-------|----|--|--|--|------|
|      | 5       | 10  | 15  | 20  | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 1    | 2    | 3    | .4    | 5     |    |  |  |  |      |
| 10   | .05     | .09 | .13 | .17 | .21  | .25  | .30  | .34  | .38  | .42  | .46  | .50  | 1.00 | 1.50 | 2.00  | 2.50  | 10 |  |  |  |      |
| 12   | .05     | .10 | .15 | .20 | .25  | .30  | .35  | .40  | .45  | .50  | .55  | .60  | 1.20 | 1.80 | 2.40  | 3.00  | 12 |  |  |  |      |
| 14   | .06     | .12 | .18 | .24 | .30  | .35  | .41  | .47  | .53  | .58  | .65  | .70  | 1.40 | 2.10 | 2.80  | 3.50  | 14 |  |  |  |      |
| 16   | .07     | .14 | .20 | .27 | .34  | .40  | .47  | .54  | .60  | .67  | .74  | .80  | 1.60 | 2.40 | 3.20  | 4.00  | 16 |  |  |  |      |
| 18   | .08     | .15 | .23 | .30 | .38  | .45  | .53  | .60  | .68  | .75  | .83  | .90  | 1.80 | 2.70 | 3.60  | 4.50  | 18 |  |  |  |      |
| 20   | .09     | .17 | .25 | .34 | .42  | .50  | .59  | .67  | .75  | .84  | .92  | 1.00 | 2.00 | 3.00 | 4.00  | 5.00  | 20 |  |  |  |      |
| 21   | .09     | .18 | .27 | .35 | .44  | .53  | .62  | .71  | .80  | .88  | .97  | 1.05 | 2.10 | 3.15 | 4.20  | 5.25  | 21 |  |  |  |      |
| 22   | .10     | .19 | .28 | .37 | .46  | .55  | .65  | .74  | .83  | .92  | 1.01 | 1.10 | 2.20 | 3.30 | 4.40  | 5.50  | 22 |  |  |  |      |
| 23   | .10     | .20 | .29 | .39 | .49  | .58  | .68  | .78  | .87  | .97  | 1.06 | 1.15 | 2.30 | 3.45 | 4.60  | 5.75  | 23 |  |  |  |      |
| 24   | .10     | .20 | .30 | .40 | .50  | .60  | .70  | .80  | .90  | 1.00 | 1.10 | 1.20 | 2.40 | 3.60 | 4.80  | 6.00  | 24 |  |  |  |      |
| 25   | .11     | .21 | .32 | .42 | .53  | .63  | .74  | .84  | .95  | 1.05 | 1.14 | 1.25 | 2.50 | 3.75 | 5.00  | 6.25  | 25 |  |  |  |      |
| 26   | .11     | .22 | .33 | .44 | .55  | .65  | .76  | .87  | .98  | 1.09 | 1.20 | 1.30 | 2.60 | 3.90 | 5.20  | 6.50  | 26 |  |  |  |      |
| 27   | .12     | .23 | .34 | .45 | .57  | .68  | .80  | .91  | 1.02 | 1.13 | 1.24 | 1.35 | 2.70 | 4.05 | 5.40  | 6.75  | 27 |  |  |  |      |
| 28   | .12     | .24 | .35 | .47 | .59  | .70  | .82  | .94  | 1.05 | 1.17 | 1.29 | 1.40 | 2.80 | 4.20 | 5.60  | 7.00  | 28 |  |  |  |      |
| 29   | .13     | .25 | .37 | .49 | .61  | .73  | .86  | .98  | 1.10 | 1.22 | 1.33 | 1.45 | 2.90 | 4.35 | 5.80  | 7.25  | 29 |  |  |  |      |
| 30   | .13     | .25 | .38 | .50 | .63  | .75  | .88  | 1.00 | 1.13 | 1.25 | 1.38 | 1.50 | 3.00 | 4.50 | 6.00  | 7.50  | 30 |  |  |  |      |
| 32   | .14     | .26 | .40 | .54 | .67  | .80  | .94  | 1.07 | 1.20 | 1.34 | 1.47 | 1.60 | 3.20 | 4.80 | 6.40  | 8.00  | 32 |  |  |  |      |
| 34   | .15     | .29 | .43 | .57 | .72  | .85  | 1.00 | 1.14 | 1.28 | 1.42 | 1.56 | 1.70 | 3.40 | 5.10 | 6.80  | 8.50  | 34 |  |  |  |      |
| 36   | .15     | .30 | .45 | .60 | .75  | .90  | 1.05 | 1.20 | 1.35 | 1.50 | 1.65 | 1.80 | 3.60 | 5.40 | 7.20  | 9.00  | 36 |  |  |  |      |
| 38   | .16     | .32 | .48 | .64 | .80  | .95  | 1.11 | 1.27 | 1.43 | 1.59 | 1.75 | 1.90 | 3.80 | 5.70 | 7.60  | 9.50  | 38 |  |  |  |      |
| 40   | .17     | .34 | .50 | .67 | .84  | 1.00 | 1.17 | 1.34 | 1.50 | 1.67 | 1.84 | 2.00 | 4.00 | 6.00 | 8.00  | 10.00 | 40 |  |  |  |      |
| 45   | .19     | .38 | .57 | .75 | .94  | 1.13 | 1.32 | 1.51 | 1.66 | 1.88 | 2.07 | 2.25 | 4.50 | 6.75 | 9.00  | 11.25 | 45 |  |  |  |      |
| 50   | .21     | .42 | .63 | .84 | 1.05 | 1.25 | 1.46 | 1.67 | 1.88 | 2.09 | 2.29 | 2.50 | 5.00 | 7.50 | 10.00 | 12.50 | 50 |  |  |  |      |
| Wage | MINUTES |     |     |     |      |      |      |      |      |      |      |      |      |      |       | HOURS |    |  |  |  | Wage |
|      | 5       | 10  | 15  | 20  | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 1    | 2    | 3    | .4    | 5     |    |  |  |  |      |

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